gabriel laboratories, ltd.
Environmental & Energy Services



LEVEL I

# ENVIRONMENTAL PROPERTY SURVEY

*Performed For*

Jepscor Metals, Inc.
P.O. Box 200
Dickson, IL 61021

*Site Location:*

3321 South Pulaski Road
Chicago, Illinois

*By*

Gabriel Laboratories, Ltd.
1421 North Elston Avenue
Chicago, Illinois 60622

*Submitted on December 19, 1990*

*by:*

Richard E. Schmidt
Field Services Engineer

*Reviewed by:*

Steven C. Sawyer
Vice President

John Polich P.E.
President

Project Number P90-11033

Table of Contents

*3321 South Pulaski Road, Chicago, Illinois*
***December 19, 1990***

## I. Introduction

Gabriel Laboratories Ltd. was retained by Mr. Elwin Millsap, of Jepscor Metals, Inc., to conduct an environmental survey of the property and structures located at 3321 South Pulaski Road, Chicago, Illinois. The survey was performed as required for refinancing of the property. Gabriel personnel conducted the property survey on November 20, 1990, under our project number P90-11033.

During the course of our survey we have attempted to determine if any potential chemical and physical hazards are present on the site. We have also generally addressed the following issues:

* Site History and Description
* Regulatory Compliance Evaluation
* Air Emissions
* Water Sources and Discharges
* Underground Storage Tanks
* Asbestos
* Hazardous Wastes and Materials
* PCBs
* Soil Conditions
* RCRA/CERCLIS/NPL/SRAPL Sites

This survey is an initial step in the examination of the environmental risks and liabilities found on this site. Whenever irregularities are found, which require a more active auditing of the property, we recommend specific actions necessary to fully evaluate those unusual situations. The more active auditing usually involves the collection and analysis of samples from various matrices. If the analytical data confirms contamination on the site, remediation may be warranted.

## II. Site Description and History

### *Site Description*

The property located at 3321 South Pulaski Road, Chicago, Illinois, is approximately 2.19 acres in size. The irregular shaped property is basically rectangular, with a curve the south end and a narrow strip extended from the northeast corner. The property is improved with a single story masonry building on the northwest section, and a connected single story steel building along the east end of the site. There are also smaller additions and a loading dock connected to the masonry building. The total footage of all improvements is roughly 35,000 square feet. A site sketch is included in the Attachments section of this report.

The single story masonry building was the first constructed on the site in 1917, on a concrete slab. The original building has a wooden roof and and office area on the west end, and contains approximately 10,000 square feet of floor space. Since 1917 there have been several small additions to the building, including a concrete loading dock, constructed in 1966, on the south side of the building.

One of the improvements on the site is the large steel industrial building connected to the east end of the original building. The steel building has large bay doors and high ceiling clearance. A railroad spur crosses through the north end of the building.

### *Site History*

Portions of the site history were obtained through building permit records. Due to equipment breakdown at City Hall, limited information was made available to us. In reviewing City records, we were, however, able to obtain the following information:

1917 - New Construction/believed to be the original building.

1945 - Repair fire damage to a one story manufacturing building.

1956 - Installed one 6,000 gallon gasoline and one 6,000 gallon diesel fuel tank south of the masonry building, for Tel Radio Transport Inc.

1956 - Flamable liquid permit/use of premises: garage, storage, & repair of own trucks.

1964 - Repair fire damage for Star West Cartage (10% loss). Use of building: garage.

1966 - New loading dock, repairs and alterations to office area at 3321 S. Pulaski, for the H. Winter Metal Co. located at 3242 S. Pulaski.

1981 - Use of building: Industrial.

1984 - Repair east side of steel building. Use of building: metal fabricating.

The property and structures are currently owned by Double A Metals, Inc. (the parent company is Jepscor Metals, Inc.) The site is currently used for recycling aluminum dross. The dross is shipped to the site from mills, die casters, and smelters in the midwest area. The aluminum is recovered from the dross in two of the three available direct heating furnaces. The aluminum is cast into 400 and 1000 pound ingots. The main byproduct, aluminum oxide, is collected and bagged on the north end of the site.

According to Mr. Elwin Millsap, President of Double A Metals, the property was purchased in February 1990, through bankruptcy court. The property had been acquired from Jay Armstrong Metals Co., Inc., who had possession of the site for approximately seven years (1983-90). During most of that period, the dross was merely processed, and then shipped off site for the actual aluminum recovery. The furnaces and dust collection system (for the oxides) had not been installed until March-April 1989, when actual aluminum recovery was initiated on site.

The property had been purchased by Mr. Armstrong from Herb Winter, who had used the facility for the H. Winter Metal Company, also for dross processing. Mr. Millsap believes only aluminum dross was processed.

The building permit records indicate the site had been obtained by Mr. Winter sometime between 1964 and 1966. Prior to 1964, the building had been used as a truck garage for at least two cartage companys.

It would appear the site was originally used for some type of manufacturing, however, no information regarding the nature of the manufacturing was obtained.

The property and structures located at 3321 South Pulaski Road, Chicago, Illinois, are located in an industrial section of Chicago, surrounded by the following:

**NORTH:** The north end of the property is bordered by the Chicago & Illinois Western, and the Illinois Central Rail Road tracks. Thirty third street is located further north.

**SOUTH:** The south end of the property is bordered by a private access road for the City of Chicago Department of Streets & Sanitation. The Commonwealth Edison, Crawford Station power plant is located further south. Coal storage for the power plant is located to the southeast.

**EAST:** The private access road continues along the east side of the property. Vacant land and coal storage for Commonwealth Edison are located further east.

**WEST:** The front of the site faces west, along Pulaski Road. Bell Pallets, and Nutemp Inc. are located west of Pulaski Road.

Based on visual observations made during our site reconnaissance, it would not appear the surrounding sites have a substantial negative impact on the subject property. However, the rail road tracks bordering the east side of the property can be a potential source of soil contamination if leakage and spillage from tank cars has occurred. Also, sulfur emissions from the power plant can also affect the air quality. Both issues are discussed further in the following section.

## III. Regulatory Compliance Evaluation

The site was inspected on November 20, 1990, by Richard Schmidt, of Gabriel Laboratories, Ltd. During our investigation of the site, we attempted to assess the regulatory and environmental aspects of the structure and the property. Our study focused on the following areas; air emissions, water sources and discharges, underground storage tanks, asbestos, hazardous wastes and materials, PCBs, soil conditions, and RCRA/CERCLIS/NPL/SRAPL sites. Each of these issues will be discussed in this section.

### A. Air Emissions

The heating systems for the building, fueled by natural gas, discharges flue gas. These systems are believed to be exempt from reporting to the Illinois Environmental Protection Agency (IEPA), as they appear to be below the one million BTU/Hour threshold for reporting and regulation of industrial properties.

The steel building located on the east side of the property has a dust collection and bagging system (bag house) for the aluminum oxide particles released from the three natural-gas fired furnaces. The system was installed in March-April of 1989, by the previous company, Jay Armstrong Metals Co., Inc. An IEPA operating permit was obtained and transferred to Double A Metals Inc. (ID number 031600FIX). The permit also includes the two direct heating rotary furnaces and the reverb (hot box) heater. This information was confirmed by Mr. Ray Pilapil, of the IEPA air permitting section.

No other regulated source of air emission was observed within the facility.

The Commonwealth Edison Crawford Station power plant located south of the surveyed site uses coal for its fuel source. Air emissions from the power plant can affect the air quality in the surrounding area. Sulfur concentrations are a major concern, since coal, which contains sulfur, is being used.

According to Dan Dammer, the regulatory compliance engineer at the Commonwealth Edison Crawford Station power plant, they have had no recent problems meeting emission standards. The plant had switched to low-sulfur coal in the early 1970's.

B. Water Sources and Discharges

The water supply for the building is from the City of Chicago Jardine Water Purification Plant. The water source is treated water from Lake Michigan. There is no recent history of drinking water contamination for this supply.

The facility discharges sanitary wastes to the local water treatment authority. In Chicago, that agency is the Metropolitan Water Reclamation District (MWRD). The facility located at 3321 South Pulaski Road, Chicago, Illinois, does not appear to require filing with the MWRD because it is exempt, due to the low water usage (less than 25,000 gallons per day), and the nature of the discharge (sanitary waste & cooling water).

Cooling water is used on the aluminum ingots once they have solidified. According to Mr. Elwin Millsap, President of Double A Metals, a modest amount of water is used, well below the 25,000 gallon per day filing requirement.

C. Hazardous Wastes and Materials

The oxide particles collected in the bagging operation are classified as special waste, according to general manager Mr. Jim Sertich. The oxides had been taken to the CID landfill by the former operators of the site. The oxides are currently shipped to Jepscor Metals, Inc. (parent company of Double A Metals, Inc.) in Dixon, Illinois, for further aluminum recovery. Final disposal of oxides is done in Dixon. New permits are being applied for at CID for disposal of oxides not suitable for additional aluminum recovery.

Waste oil (classified as special waste) from the front end loaders and lift trucks is stored in 55 gallon drums. According to Mr. Jim Sertich, approximately 30 quarts a week of waste oil is generated on site. A waste oil hauler has not been contracted to date. According to Mr. Elwin Millsap, the oil will be tested as required for proper disposal.

The Paulson Oil Company (POCO) provides new oil, hydraulic fluid, and transmission fluid for the three 300 gallon above ground storage tanks located in the southwest corner of the original building. The oils are used for the lift trucks and front end loaders. Diesel fuel used for some of the front loaders and lift trucks is provided by Sweeney Oil, and is stored in 55-gallon drums, near the waste oil.

D. Underground Storage Tanks

Underground storage tanks (USTs) are an environmental concern if leakage or spillage has occurred. Leaking or overfilled USTs can contaminate the surrounding soil, and nearby groundwater.

Through a records search, it was found there are no USTs registered at 3321 South Pulaski Road, Chicago, Illinois, with the Illinois Office of the State Fire Marshal. However, a building permit had been issued by City of Chicago on 10/23/56 for the installation of two 6,000 gallon underground storage tanks, one for gasoline and one for diesel fuel. City Hall records indicate the tanks were emplaced and inspected on 12/18/56, south of the original building, where the existing loading dock is located. The tanks were installed by P. R. Streich & Sons for Tel Radio Transport Inc.

Another permit was obtained on 10/27/66 for construction of the existing loading dock at the south end of the original building. The loading dock is recessed in the ground so that the top of the dock is at ground level. It would appear the USTs would have to have been removed before the dock was installed, if they were emplaced in that area.

No evidence of existing USTs was found. Evidence of an existing UST can include vent lines, fill ports, pumps, meters, and manway openings.

E. Asbestos

The site was inspected for asbestos in accordance with the USEPA guidelines set forth in the "Guidance for Controlling Asbestos Containing Materials In Buildings" issued in 1985. The purpose of this segment of our inspection was to identify the extent to which asbestos containing materials (ACM) were used, or subsequently added in the construction of the facility surveyed.

Industry standard practice in the environmental consulting business requires the removal of ACM which poses a threat to the health of those who could be exposed to fiber release from a friable source. Members of the financial community also require removal of ACM in those cases. Often the removal of ACM is required whenever it poses a threat the security the loan.

Pipes within the open areas of the building were inspected for suspected asbestos containing insulation. None was observed

throughout the structure. All observed insulation (present in very limited amounts) was suspected to contain fiberglass.

Sections of the office areas contain nine inch floor tile. Floor tile often contains asbestos fibers. Although floor tile is not generally considered a friable material, fibers can be released if the tile becomes severely damaged, especially during removal. The floor tile observed in the office areas of this facility, however, was found in good condition. Damaged floor tile was found in the open shop area south of the main office, however, only a relatively small area was covered with tile (< 100 square feet) and would not appear to be a major concern.

Friable ceiling materials were observed in some areas of the building (office areas). There is a possibility these materials may contain asbestos. Gabriel would recommend testing these materials if they become severely damaged, or if removal is contemplated.

**F. Polychlorinated Biphenyls, PCBs**

PCBs are controlled by the Toxic Substance Control Act (TSCA) of 1980. TSCA is charged with regulating the manufacture of substances it considers toxic and harmful to health and the environment. Though banned from U.S. production in 1970, older electrical equipment and recycled oil may still contain PCBs.

Typically, PCBs were incorporated in transformer and switchgear oil for increased thermal conduction, and their dielectric (electrically insulating) properties. No oil leakage was observed around any of the electrical service equipment inspected at this site. One transformer was found in the compressor room, however, the transformer was a newer "dry type", which would not contain dielectric fluid.

Seven Commonwealth Edison, pole mounted transformers, were found on two utility poles southeast of the original building (see the site sketch included in the Attachments section of this report). No fluid leaks were observed from any of the seven transformers.

Commonwealth Edison is required to label all PCB containing transformers. No label was observed on the transformers found on this site. However, the absence of a label does not negate the presence of PCBs.

Some oil staining was observed under the above ground storage tanks located near the maintenance shop. Gabriel would suggest collecting a PCB wipe sample in this area.

## G. Soil Conditions

The exterior portion of the property was inspected for evidence dumping or of chemical or liquid spills. Indications of potential surface soil contamination can include unusual stains in the soil, areas devoid of vegetation, or areas with distressed vegetation.

Gabriel personnel observed soil staining under two above ground storage tanks located at the southwest corner of the steel building (see site sketch and photographs in the Attachments section of this report). The two tanks, with 300 and 500 gallon capacities, had been used for storing diesel fuel. The tanks are no longer in use, however, evidence of past spillage/leaks is present over an area of approximately 10x10 feet. Gabriel recommends sampling the soil in this area for volatile organic compounds, to determine the extent of contamination, so that cleanup requirements and remedial costs can be determined.

The interior of the building was inspected for evidence of chemical or liquid spills. Chemical spills can contaminate the subsurface soil by seeping through cracks and seams in the concrete floor. Once contaminants have "channeled" through cracks and seams, horizontal migration of contaminants can occur, thus affecting a much larger area. Vertical migration of contaminants are a potential threat to the integrity of the groundwater.

Oil staining was observed on the concrete floor beneath the three above ground storage tanks located in the southwest corner of the original building (near the maintenance shop). Additional staining was observed just southwest of the above ground storage tanks, where seven 55-gallon drums were stored. The drums were found to contain waste oil and diesel fuel. The staining wasn't as extensive as that found beneath the storage tanks, however, several cracks were observed in the concrete floor. Gabriel would recommend performing soil borings in both areas and collecting samples for laboratory analysis. The samples should be analyzed for volatile organic compounds and PCBs. Photographs of both areas are included in the Attachments section.

Gabriel would suggest fabricating some type of secondary containment for the drums and above ground storage tanks. Secondary containment can include drum packs, diked areas, or

plastic or steel trays. Secondary containment can minimize any further contamination of soil and groundwater, and the associated clean up expenses.

Through our records search we have found two underground storage tanks (6,000 gal. gas and 6,000 gal. diesel fuel) were installed south of the original building. Although it would appear the tanks may have been removed, soil and groundwater contamination may still exist. Gabriel recommends soil borings and analysis for volatile organic compounds in the area of the loading dock, where the tanks were emplaced.

The site has been used for processing aluminum dross for roughly 25 years. Aluminum is not regulated under RCRA, however there is a possibility some metals which are regulated may have been inadvertently introduced to the site. This coupled with the industrialized nature of the area, and the nearby rail road tracks (transfer points) would lead us to believe a modest amount of general soil borings are required to truly assess the soil conditions at this site. Samples should be analyzed for common industrial contaminants (volatile organics, RCRA metals, and PCBs).

## H. RCRA/CERCLIS/NPL/SRAPL Sites

The Resource Conservation and Recovery Act (RCRA) of 1976 implemented Federal and State programs for the regulation of land disposal of waste materials and the recovery of materials and energy resources from the waste stream. The act regulates the generation, transportation, treatment, storage and disposal of hazardous waste.

RCRA notifiers are facilities that generate, transport, store, or dispose of a substance that is included on a EPA generated list of what it deems a hazardous material under 40CFR261. There are four RCRA notifiers which are required to file annual reports with the IEPA, within a half mile radius of 3321 South Pulaski Road, Chicago, Illinois:

| Name & Address of Facility | Gallons of Hazardous waste | Tons of Hazardous waste |
|---|---|---|
| Crown Cork & Seal Co. Inc.<br>3501 W. 31st St.<br>Chicago, IL | 41,870 | 158.73 |

| | | |
|---|---|---|
| Com Ed Crawford Station<br>3501 S. Pulaski<br>Chicago, IL | 660 | 2.442 |
| Northwestern Plating Works<br>3114 S. Kolin Ave.<br>Chicago, IL | 16,160 | 74.34 |
| Modern Process Equipment<br>3150 S. Kolin<br>Chicago, IL | | |

The above list does not include small quantity generators, which generate less than 100 kilograms (220 pounds) of hazardous waste per month. The quantities listed were obtained from an IEPA 1988 annual report.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) of 1980 promulgated and enacted Federal and State programs to initiate the cleanup of uncontrolled hazardous waste sites. This act assures the protection of human health and the environment.

CERCLIS (CERCLA Information System) is a computer database of sites that have been proposed to be investigated by the Environmental Protection Agency (EPA). Sites can be placed on the CERCLIS list for a variety of reasons. Some of these reasons include complaints to the EPA, an inspection from the EPA, or a referral from an another agency. It should be noted, therefore, that a site included on a CERCLIS list does not necessarily pose a threat to the environment. An inspection of the site by qualified personnel is required before any conclusions can be made.

Once a site is put on the CERCLIS list, the EPA performs a preliminary assessment of the site. The preliminary assessment determines whether the site requires additional investigation, or whether no further action is required. The site will remain on the CERCLIS list regardless of the outcome of the preliminary assessment.

The Illinois Environmental Protection Agencys database was searched for CERCLIS sites near the surveyed area. There are no CERCLIS sites located within a half mile radius of 3321 South Pulaski Road, Chicago, Illinois.

It should be noted that the RCRA and CERCLIS lists do not necessarily overlap.

This site information is provided by the Illinois Environmental Protection Agency. The data is classified by zipcode, at our request, and is updated periodically. This information is required to more fully characterize how the surrounding area impacts the specific site under investigation.

The National Priorities List, or NPL, identifies and ranks target areas for long term remedial action. Updated by the Environmental Protection Agency once a year, the NPL identifies the worst uncontrolled or abandoned hazardous waste sites in the United States. Factors taken into consideration prior to national priority status include; the number of people potentially exposed, the likely pathways of exposure, and the importance and vulnerability of the underlying supply of groundwater.

Gabriel personnel reviewed the NNPL records provided by the EPA and found no NPL sites within a two mile radius of 221 South Lively Boulevard, Elk Grove Village, Illinois.

In 1984, the Illinois Environmental Protection Agency (IEPA) set up their own environmental clean-up priority list. This list is known as the State Remedial Action Priorities List, or SRAPL. This program is funded to deal with landfill, industrial, and other waste sites which are polluting or threaten to pollute the environment.

Gabriel Personnel reviewed the SRAPL records provided by the IEPA and found no SRAPL sites within a two mile radius of 221 South Lively Boulevard, Elk Grove Village, Illinois.

Both NPL and SRAPL sites are government funded sites which have current or future plans to undertake stages of correctional action. Correctional actions include; a notice to the responsible party(s), a remedial investigation, a feasibility study, remedial design, remedial construction, and an operation and maintenance program to prevent further contamination.

The sites listed on the NPL and SRAPL are considered to pose a serious threat to the environment, and often times the surrounding communities.

## IV. Recommendations

After review of the Level I survey performed at 3321 South Pulaski Road, Chicago, Illinois, Gabriel feels the following issues warrant further attention:

1) Oil staining was observed beneath the three 300-gallon above ground storage tanks located within the original building. Gabriel recommends performing a wipe sample in this area to test for the presence of PCBs. Additionally, soil borings should be performed in the same area to determine the extent of soil contamination (if any) that is present. Gabriel would also suggest fabricating a secondary form of containment (i.e. dike or tray) to contain any future leaks/spills.

2) Staining was also observed around the seven 55-gallon drums of waste oil and diesel fuel were found stored. Soil borings and a secondary form of containment are also recommended in this area.

3) Excessive staining of the soil was found beneath the two above ground storage tanks located outside the southwest corner of the steel building. The tanks had been used for storing diesel fuel. Gabriel recommends performing soil borings and analysis in this area.

4) Gabriel recommends performing additional site borings on the remainder of the property for the following reasons; the industrial nature and historical use of the property, the emplacement of underground storage tanks on the property, and the nearby rail road tracks (a rail spur is located on site). The samples obtained during drilling should be analyzed for common industrial contaminants (volatile organic compounds, RCRA metals, and PCBs).

## V. Statement of Limitations

The environmental assessment detailed in this report has been performed in accordance with generally accepted methods and practices of the environmental laboratory engineering profession. The scope and depth of this study were as directed, and as agreed to, by the client.

Gabriel uses experienced and trained professionals in attempting to locate and identify hazardous materials or conditions, however, we do not warrant that all such materials have been identified. It is possible that some materials containing a hazardous substance were not visible or accessible to the surveyor or for various other reasons were not sampled.

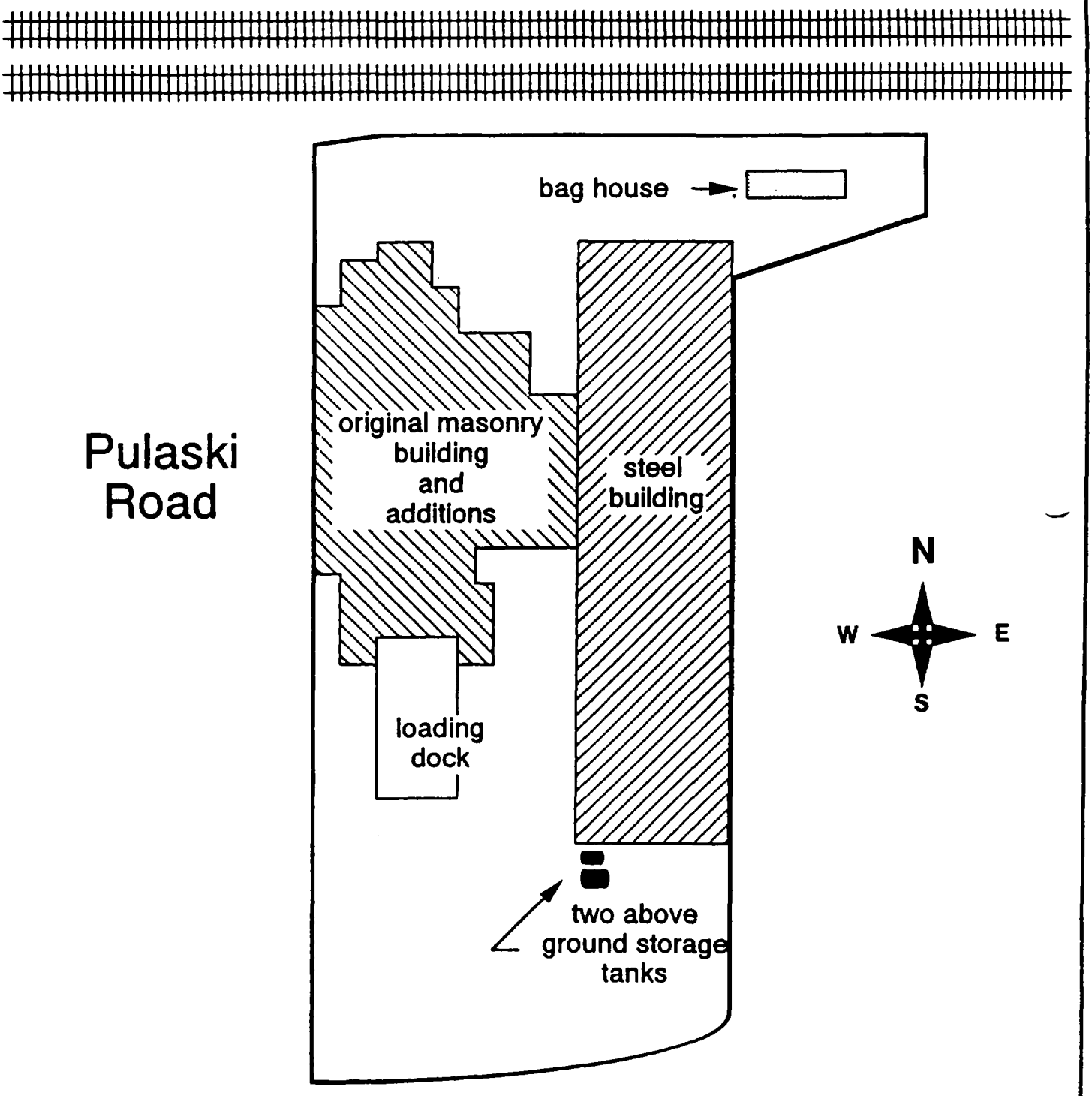
All findings are based on documentary review, conversations, and analytical data proved by the laboratory as noted in this report. These findings are not to be considered scientific certainties. The intent of this study was to identify environmental concerns which would be obvious to a professional's skills, standards, and knowledge. This report is not intended to represent an exhaustive research of all potential hazards which may exist at this site.

This report also does not purport to be representative of future conditions or events. Activities which transpire subsequent to this report which result in adverse environmental impacts are not to be construed as relevant to this study.

This report has been performed for the exclusive use of the client. Our report and its findings shall not, in whole or part, be disseminated to any other party, nor be used by any other party without prior written consent by Gabriel Laboratories, Ltd.

## VI. Attachments

Chicago & Illinois Western and Illinois Central Rail Road Tracks




| | | | |
|---|---|---|---|
| CLIENT Jepscor Metals, Inc. | | DRAWN BY RS | SHEET 1 |
| SITE 3321 South Pulaski Road, Chicago, Illinois | | DATE 12/18/90 | OF 1 |
| SUBJECT Site Sketch | PROJECT NO. P90-11033 | SCALE not to scale | |


gabriel laboratories, ltd. 1421 NORTH ELSTON CHICAGO, ILLINOIS 60622 PHONE (312) 486-2123 FAX (312) 486-0004

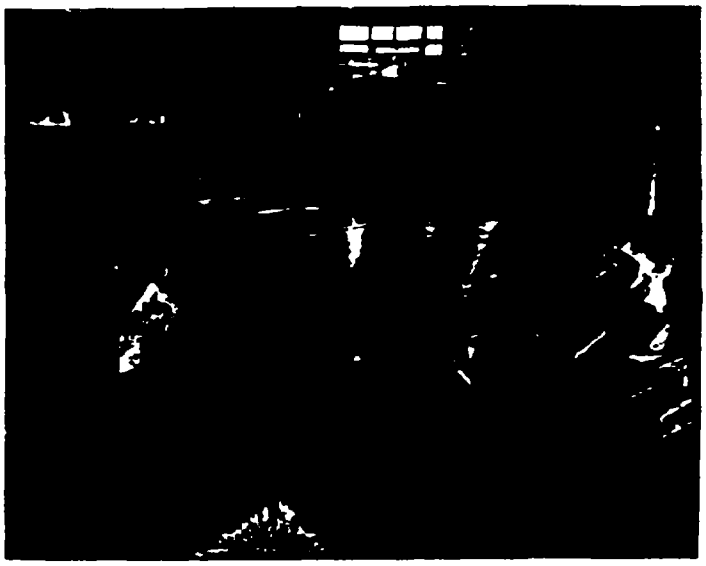
gabriel laboratories, ltd.
Environmental & Energy Services
3321 South Pulaski Road, Chicago, Illinois
December 19, 1990

# Site Photographs

Site located at 3321 South Pulaski Road, Chicago, Illinois, as viewed by Gabriel personnel on November 20, 1990.

Above ground storage tanks located outside the southwest corner of the steel building. The capacities of the tanks are 300 and 500 gallons. The tanks were used for storing diesel fuel. The soil below the tanks is stained from past spillage and/or leakage.

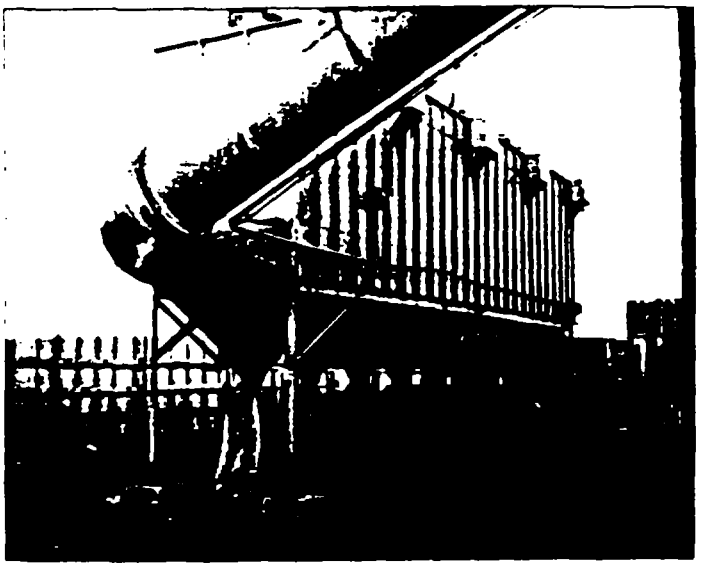
# Site Photographs



Four of the seven 55-gallon drums found stored in the masonry building. The drums are used for storing diesel fuel and waste oil. Some minor spillage was found on the floor, where cracks in the concrete were observed.

Above ground storage tanks in the masonry building. The capacities of the tanks are 300 gallons each. The tanks are used for storing oil, trans fluid, and hydraulic fluid. The concrete floor below the tanks is stained from past spillage and/or leakage.

# Site Photographs



The bag house located north of the steel building. The bag house is used to collect aluminum oxide dust particles released during the dross processing.